



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/681,497

10/08/2003

Stephen G. Bales

LA 001

5906

48373

7590

01/14/2009

STEPHEN G. BALES
17 HART LANE
SEWELL, NJ 08080

EXAMINER

DANIELS, MATTHEW J

ART UNIT

PAPER NUMBER

1791

MAIL DATE

DELIVERY MODE

01/14/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Response to Arguments

1. Applicant's arguments filed 5 January 2008 have been fully considered but they are not persuasive. The arguments are on the following grounds:

a) Claim 17 has been amended to overcome the rejection under 35 USC 112, first paragraph.

b) The rejections over Chow are overcome by amendments to Claims 1 and 16 and cancellation of Claims 10 and 11.

c) Claims 1 and 16 are amended to be limited to polyolefins. Touval teaches that a minimum level of flame retardancy requires at least 2% tin oxide, 8% colemanite, and at least 8% of an organic halogen. In Aida's polyethylene, this would require at least 8% of an organic halogen, 2% tin oxide, and 8% colemanite to be effective as a flame retardant, which is not consistent with the 2-12% range or 3-5% range of this invention.

d) The combination of tin oxide and wood would work against an effective fire retardant combination as noted in the May 30th response (USDA Study by Holmes produces glowing in wood)

e) The current invention produced a surprising result given that the Koskiniemi teaching is that colemanite did not effectively suppress mold growth. No one attempted the use of colemanite in these composite products until this invention.

f) Colemanite is not an effective polyolefin flame retardant at the levels of the invention (which would render Touval unsuited for its intended purpose).

g) Pelikan teaches a total weight of the carrier material which is 22.5%. Verhey shows that significant wood decay doesn't begin until wood content is 50% or more. And therefore, one would not be motivated to add decay preventative material to Pelikan's material.

2. These arguments are not persuasive for the following reasons:

a,b) These arguments are directed to claim amendments which are not being entered.

c) This argument is directed to claim amendments which are not being entered. Additionally, the proposed amendments do not limit Claims 1 and 16 to polyolefins only - both claims still appear to recite “thermoplastic,” rather than “polyolefins.” Applicant argues that Touval requires at least 2% tin oxide, 8% colemanite, and at least 8% chlorinated paraffin. However, it is unclear that this argument accurately characterizes the broadest reasonable interpretation of the Touval reference. See Claim 1 of the Touval reference, where 0.5 to 10 phr flame retardant is used, and where that flame retardant contains 80% of a component which may be colemanite. Thus, it would appear to be the case that 8% colemanite is the maximum, but that lesser amounts would have been within the teaching and suggestion of Touval.

d) While the references appear to provide conflicting views on this issue, it is unclear that Applicant has established the nonobviousness of the claimed method.

e) It is believed to be the case that the result discovered in this application flows naturally from those already achieved in the prior art. “The fact that appellant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious.” *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985) (The prior art taught combustion fluid analyzers which used labyrinth heaters to maintain the samples at a uniform temperature. Although appellant showed an unexpectedly shorter response time was obtained when a labyrinth heater

Art Unit: 1791

was employed, the Board held this advantage would flow naturally from following the suggestion of the prior art.).

f) It is believed to be the case that Claim 1 of the Touval reference contradicts this assertion. 0.5 to 10 phr flame retardant is used, in which 80% of the flame retardant may be comprised of colemanite.

g) This argument is contradicted by the Borogard ZB reference. Borogard ZB controls mixed fungi in plastic and rubber products, without regard to any addition of wood to form a composite. Wood composite materials are addressed under a separate paragraph on page 1 of the General Use Instructions. The reference therefore suggests that mixed fungi is a problem on plastics and rubbers, without regard to use as wood composites.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MATTHEW J. DANIELS whose telephone number is (571)272-2450. The examiner can normally be reached on Monday - Friday, 8:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on (571) 272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1791

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Matthew J. Daniels/
Primary Examiner, Art Unit 1791
1/13/09